Anti-GFP antibody, rat monoclonal (1A5)

60-001　　100 ug

The green fluorescent protein (GFP) is composed of 238 amino acids (26.9 kDa), originally isolated from the jellyfish *Aequorea victoria* that fluoresces green when exposed to blue light (1). In cell and molecular biology, the GFP fused gene is frequently used as a reporter of expression and protein localization (2, 3). The antibody was produced from the hybridoma cultured in serum-free medium and purified under mild conditions by propriety chromatography processes.

Applications

1. Western blotting (~1ug/ml)　2. Immunoprecipitation　3. Immunocytochemistry
4. Chromatin Immunoprecipitation (ChIP)　5. ELISA

Specification

Immunogen: Recombinant GFP protein

Isotype: Rat IgG1 kappa

Form: Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol, filter-sterilized

Specificity: Specific to GFP and GFP-fused proteins

Storage: Shipped at 4℃ or -20℃, and upon arrival, aliquot and store at -20℃.

Data Link

UniProtKB/Swiss-Prot P42212 (GFP_AEQVI)

References

1. Shimomura O *et al* (1962) "Extraction, purification and properties of aequorin, a bioluminescent protein from the luminous hydromedusan, Aequorea" *J Cell Comp Physiol* 59: 223–39 PMID: 13911999
2. Chalfie M *et al* (1994) "Green fluorescent protein as a marker for gene expression" *Science* 263 (5148): 802–5 PMID: 8303295
3. Tsien R (1998) "The green fluorescent protein" (PDF) *Annu Rev Biochem* 67: 509–44 PMID: 9759496

Related product: #60-003　anti-GFP monoclonal antibody (1A5), Sepharose4B™-conjugated

Immunofluorescent staining with anti GFP antibody, 1A5

Fluorescent image due to GFP

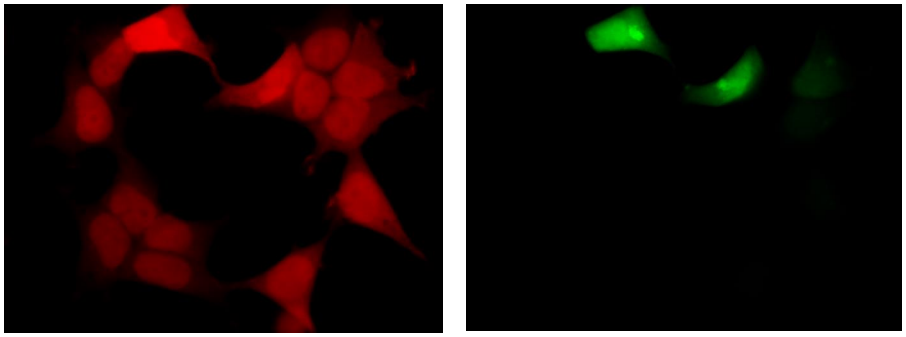

Fig.1 Fluorescent image of COS1 cells due to GFP of GST-ZIPK fusion protein expressed in HEK293T cells (Right) and the sams cells were immunostained by using anti-GFP antibody 1A5, followed by Texas Red-conjugated anti-rat IgG (Left). Note that fluorescence by the immunofluorescent staining using 1A5 antibody is much stronger than fluorescence due to GFP

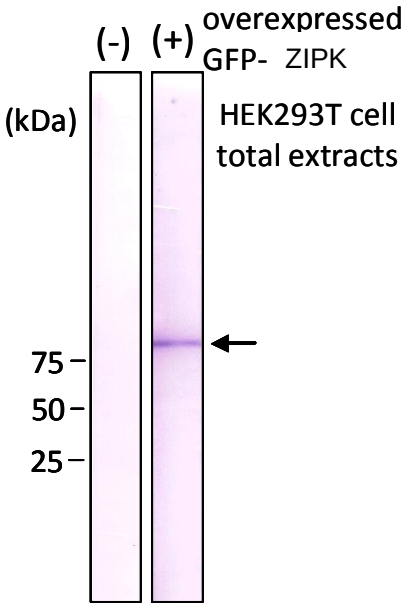

Fig.2 Detection of GFP-ZIPK fusion protein over-expressed in HEK293 cells by Western blotting with antibody 1A5.
(-) HEK293T cell extract without overexpression
(+) GFP-ZIPK protein- overexpressed HEK293T cell extract

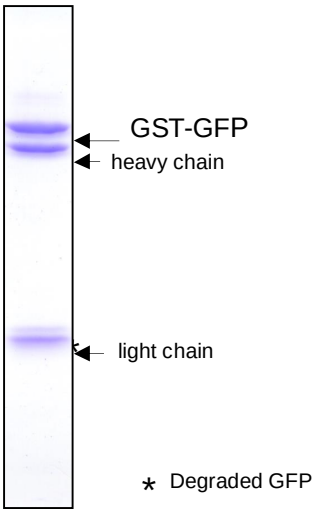

Fig.3 Immunoprecipitation of GST-GFP fusion protein with antibody 1A5.